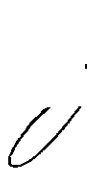


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7/25/68

IDENTIFICATION OF THE POTENTIAL GRIEVANT

A THESIS

Presented to

The Faculty of the Division of Graduate  
Studies and Research

by

John Anthony Nowak

In Partial Fulfillment

of the Requirements for the Degree

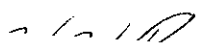
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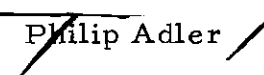
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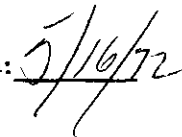
IDENTIFICATION OF THE POTENTIAL GRIEVANT

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## SUMMARY

Attempts to identify employees in industry who tend to submit grievances have produced conflicting results. The confusion may be attributable to the small number of studies reported in the literature, the variation among subject samples in terms of size and occupations, and the different methods used to select subjects for nongrievant comparison samples.

This study was designed to determine whether differences exist between biographical and work-record data associated with a 250-subject sample of employees who submitted grievances during a six-year period and data associated with a matched sample of employees who did not submit grievances during that same period. The non-grievant sample was selected proportionally on the basis of the sex, seniority, and job classification of individual employees who comprised the grievant sample. A total of 40 variables were selected for comparison based on information available in one company's individual personnel records.

A one-way multivariate analysis of variance revealed a significant difference between the groups on the 40 variables. Multiple t tests revealed that the means of 14 of the 40 variables were different at the .02 level of significance. In terms of the biographical variables,



indications are that grievants were born later, were hired at an earlier age, had more formal schooling, were more likely to have physical limitations, and had more derogatory information included in letters of recommendation than nongrievants. In terms of work-record variables, grievants averaged higher wage increases, took fewer sick leaves, were laid off for longer periods, had more temporary and permanent promotions, were demoted more often, had higher prior grievance rates, took more leaves for personal and military reasons, and spent more time on those leaves than did nongrievants.

## CHAPTER I

### INTRODUCTION

According to Slichter, Healy, and Livernash (1960), grievances in industry should be distinguished from complaints. A complaint may be concerned with any behavior of the employer that the employee or union may not like. A grievance is more specific in that it involves a charge that the union-management contract has been violated. Complaints, therefore, may not always be proper subjects for grievances. It is also possible for a company to submit grievances alleging that the union or employees violated the union-management contract. In practice, however, the latter is extremely rare since the company normally possesses the power to bring about contract compliance without resorting to formal procedures of submitting written grievances.

High grievance rates are generally recognized as costly in terms of direct-cash outputs to grievants and lost-wage and salary expenses. For example, the large plant where the data for this study were collected estimated its total costs for processing and settling grievances to be several hundreds of thousands of dollars per year. In spite of the expense and disruption resulting from grievances, there has been very little research effort devoted to the study of grievances. Ash (1970)

indicated that the lack of interest in this area of labor-management relations can be attributed to management's being the primary consumer of the psychologist's wares, the failure of management to invite the psychologist to investigate the problems, union lack of enthusiasm for psychology, and the psychologist's unfamiliarity with labor-management problems.

### Previous Research

Six studies were found in the literature pertaining to grievances. Three of these studies dealt with the nature of grievants and the others investigated other aspects of grievances. For example, McKersie and Shropshire (1962) reported a successful program for reducing written grievances by eliminating underlying causes and emphasizing oral submission of grievances with settlement at the lowest possible level of the formal grievance procedure. Their study was conducted in a large multiplant manufacturing company located in the Midwest and covered a 12-year period from 1950 to 1962. Some of the actions taken by the company and the union included the elimination of inter-union rivalry, institution of policy guidelines for the entire area of collective bargaining, and the establishment of centralized control of grievance processing. These programs virtually eliminated the written grievance. This is not to say, however, that the grievance problem was solved. Grievances were still being submitted in oral form but in reduced numbers.

Fleishman and Harris (1962) found a correlation of .37 between grievances and turnover when they examined the grievance behavior of 57 production work groups in one motor truck plant located in the Midwest. Ronan (1963) compared grievance activity from 1957 to 1961 between two plants associated with a company that manufactures heavy processing equipment for the metals industry. He found that the particular plant did have a significant effect on the number of grievances submitted. The plant with a lower grievance rate was in operation over 50 years, unionized, and had 2,850 shop employees. The plant with the higher grievance submission rate began its operation in 1957, was not unionized, and had only 850 shop employees. The type of work an employee performed apparently did not influence the number of grievances he submitted. For example, those who perform dirty, dangerous, and physical work requiring little skill did not submit grievances any more or less often than did semiskilled and highly skilled workers. The latter group, however, received a favorable settlement as a result of their grievances a significantly higher percentage of the time than did the unskilled worker. Both groups submitted grievances for similar reasons and seemed to follow the same pattern in terms of rate of grievance submission. Ronan concluded from his study that the particular plant made a difference on the number of grievances submitted by employees but that the only effect work group attributes had on grievance activity was whether a favorable settlement was obtained.

From the foregoing it appears that grievance activity may be influenced by underlying causes for submitting grievances, turnover, and characteristics of the plant where employees are working. Additionally, the evidence indicates that successful grievance settlement may be associated with the skill level of employees.

The observation that employees continue to submit grievances in spite of efforts to reduce underlying causes suggests that perhaps the nature of grievants should be investigated to see whether they differ in some respect from nongrievants. This aspect of the grievance problem was the subject of investigation for the remaining three studies reported in the literature. Eckerman (1948) developed the hypothesis that a statistical analysis of grievances might indicate that significant differences exist between grievant employees and nongrievant employees. Eckerman found that foundry and machine shop workers who had submitted grievances started working for the company at a lower rate, had a larger wage increase, were in better physical condition, had more children, and were less likely to have been born in the South than a random sample of nongrievants. The implication of this study seems to be that the more settled the employee, the more likely he is to grieve.

Sulkin and Pranis (1967) conducted a pilot study to determine the feasibility of gathering limited data from personnel records and of employing these data to generate hypotheses for a more extensive in-

vestigation of whether a typical grievant exists. Subjects for this study included 58 production workers in a Chicago heavy machinery plant who submitted one or more grievances during 1962 and 1963, and a sample of 53 nongrievant employees selected at random to serve as a comparison group. The results of this study indicated that grievants had more education, were more active in the union, had a higher absentee rate, had a higher late rate, and received lower wages with fewer net increases than nongrievants. Grievants in this study appear to be somewhat assertive. However, the grievants did not appear to be rewarded for their behavior in terms of higher pay.

Ash (1970) analyzed some of the factors associated with grievances in an industry employing over 10,000 production and maintenance workers. A selection of 159 grievants was matched to a sample of 159 nongrievants in terms of being hired for a job within the same bargaining unit, year hired, and current employment status in the company. Ash found that grievants were younger, predominantly male, less likely to be married, more likely to be American citizens, and more often rehires than were nongrievants. These findings suggest that grievants may not be as mature as nongrievants.

Finally, in an unpublished study conducted at about the same time in the same plant as the present study, DeWire (1972) compared multiple grievant biographical and work-record data for 97 subjects with similar data for 97 nonmultiple grievants. A multiple grievant

was defined as an employee who submitted more than two grievances during the period 1960 through 1965. The nonmultiple grievant sample was matched to the grievant sample in terms of sex, seniority, and job classification. The results of this study indicate that multiple grievants were younger, had more education, were promoted more often, and had more derogatory information in their files than did nonmultiple grievants.

The last four studies seem to indicate that grievants may differ from nongrievants on some basis. The basis for the difference, however, is not clear. For example, Eckerman (1948) reported that grievants had larger increases in pay than nongrievants whereas the opposite was true in the results reported by Sulkin and Pranis (1967). Eckerman also indicated that grievants had more children than nongrievants whereas Ash (1970) indicated that grievants tended to be single and had fewer children. These conflicting results might be attributed to several reasons. For example, the studies were conducted with limited populations in terms of size and occupations. Eckerman and Sulkin and Pranis apparently did not match their subjects on presumably relevant variables. Except for DeWire's study, it is not clear whether variables were indexed to compensate for the different periods of service among subjects. Whatever the case, there is a clear need for further research both because of conflicting results of past research and the limited number of studies conducted.

### Grievance Procedure

A description of the formal grievance procedure used at the plant where the present study was conducted is outlined in Appendix A. In essence, there are four steps an employee may take to satisfy his grievance. At Step 1 the grievance may be settled within the department. If no settlement is reached, the grievance may proceed through the labor relations office at Step 2, union-company committee at Step 3, and finally, arbitration at Step 4. The decision of the arbitrator is binding on all parties concerned.



## CHAPTER II

### RESEARCH OBJECTIVE

The objective of this research was to determine whether or not biographical and work-record information available in company personnel records could be used to identify employees with a tendency to submit grievances. The underlying hypothesis was that such differences do exist and that biographical and work-record information associated with grievants would be significantly different from similar data associated with nongrievants. The problem, therefore, was to compare the available data in such a way as to identify specific variables that seem to be significantly different for separate grievant and nongrievant groups.

Knowledge regarding the identification of employees with a tendency to submit grievances would be quite useful for several reasons. If a manager knows which employees are likely to submit grievances, he could make a special effort to reduce the likelihood that grievances will be submitted. For example, the special effort may be providing detailed explanations for managerial actions, emphasizing compliance with the union-company agreement within departments, or resolving problems within departments with unusually high grievance submission

rates.

Knowing which variables are associated with the differentiation of grievants from nongrievants would provide clues for the further investigation of problems associated with the identification and reduction of underlying causes for grievance submission. Properly applied, this information should have far-reaching effects in terms of improved job satisfaction, reduced costs, increased productivity, and improved working conditions.

The general objective involving effective identification of potential grievants has merit in that more effective management decisions may be realized in work situation design, policy formation, and planning.

This investigation was an exploratory study designed to determine which biographical and work-record variables, if any, differentiate between a group of grievants and a group of nongrievants.

## CHAPTER III

### PROCEDURES

The plant involved in this study experienced some 4,350 formal grievances during the period between 1960 and 1965. Considering the bargaining unit size during that period, the per capita grievance submission rate averaged 28 grievances submitted per 100 employees per year. A list of those submitting grievances was constructed from company records, and a 250-subject grievant sample was compiled by selecting every 17th individual on the list. If a record for an individual was not available, the next name on the list was selected to maintain the grievant sample at 250. These individuals were matched with a similar sample of 250 nongrievants in terms of sex, seniority within two years, and job classification. This was accomplished by locating the grievant on a computer listing that listed individuals by seniority within job-classification categories and by selecting the next individual of the same sex whose name appeared on the list. The nongrievant list was then compared to the list of 4,350 grievants to insure that none of the nongrievants submitted a grievance during the period 1960 through 1965. If a nongrievant appeared on the grievant list, his name was deleted and the next name on the computer listing which did not appear on

the grievant list was selected. As an additional step in attempting to make the nongrievant sample as free from grievances as possible, the nongrievant list was submitted to the company labor relations department for screening. Members of the department reviewed the list and identified individuals who submitted a total of two or more grievances since 1965. Those who did submit two or more grievances were replaced by individuals who followed them on the computer listing whose names did not appear on the list of grievants and were not among those identified as having submitted two or more grievances since 1965. For the purposes of this study, therefore, a grievant is operationally defined as an individual employee who submitted at least one individual or group grievance during the period 1960 through 1965. On the other hand, a nongrievant is operationally defined as an individual employee who did not submit an individual or group grievance during the period 1960 through 1965 and did not submit more than one grievance subsequently as determined by the labor relations department.

The data for this study were obtained solely from personnel records maintained by the company. No attempt was made to contact individual employees, and all subjects remained anonymous to everyone except the investigator who used personal identification for control purposes only. After the data were gathered, personal identification as a means of control was replaced with a numerical control system, and the personal identification control sheet was destroyed.

Data gathered were the same for all subjects and can generally be divided into two categories: biographical information associated with the individual which he provided when he was initially hired by the company; and information relative to the work record of the individual from the date he was hired to termination or June 30, 1971, whichever occurred earlier. The cutoff date was established to preclude the possibility of bias being introduced by gathering grievant data prior to the nongrievant data. The data-gathering effort extended over a period of several months. Additionally, work-record data were gathered for the entire span of each subject's work history in an effort to provide an overall picture of both grievants' and nongrievants' performance.

The first category of data was extracted primarily from the individual work application form. Examples of these data include employee responses regarding marital status, home ownership, height, weight, etc. Fingerprint cards were used to determine race and to verify sex. Form letters of recommendation from acquaintances and former employers were used to determine whether or not the employee had derogatory information in his personnel record when he was initially hired.

The second category of data consisted of information extracted from rating forms, payroll accounting forms, and routine personnel action forms. These data included information relative to wage increases, promotions, demotions, leaves, layoffs, prior grievances,

commendations, admonishments, etc.

### Variables

Forty variables were selected from the information available in the personnel records. These included:

1. Wage increases. Hourly rate of pay increase expressed in dollars. Determined by subtracting initial hourly rate paid at "hire" (time of hiring) from the rate of pay received at the termination of the period during which an employee must grieve to be classified as a grievant (December 31, 1965) divided by the total years of service to the company as of that same termination date.

2. Marital status. Whether or not an employee was married when he was initially hired.

3. Exemptions. The number of exemptions claimed at hire for income tax withholding purposes.

4. Owns home. Whether an employee owned a home or rented when he was hired.

5. Height to weight ratio (H to W ratio). Obtained by dividing each individual's height in inches by his weight in pounds.

6. Birthplace. Whether an employee was born within or outside the State of Georgia.

7. Birth year. The year an employee was born minus 1900.

8. Hiring age. The age of an employee at the time he was

hired expressed in years.

9. Veteran. Whether or not an employee was on active military duty prior to his initial hire date.

10. Military status. Whether or not an employee was a member of either the National Guard or Reserves at hire.

11. Education. The number of years of formal education the employee completed as of his initial hire date.

12. Jobs held. The total number of jobs held during a ten-year period prior to hire excluding military service but including self-employment such as farming.

13. Residences. The number of residences each employee occupied during a five-year period prior to hire. Residences during active military service were not included.

14. Police record. Whether or not an employee had been arrested for an offense other than minor traffic violations prior to hire.

15. Race. Whether an employee was white or nonwhite.

16. Derogatory information (Derog info). Whether any letters of recommendation solicited from former employers or acquaintances as furnished by the prospective employee contain information of a derogatory nature. For example: termination without notice, excessive drinking, and being uncooperative with supervisors.

17. Employee performance notices (EPNs). The number of employee performance notices on file in an employee's personnel record

divided by the total years' service to the company as of 30 June 1971. EPNs are issued to employees who violate company rules or policy. For example, EPNs could be issued for traffic violations, excessive absentee rates, unacceptable job performance caused by neglect, sleeping on the job, etc.

18. Commendations. The number of commendations received per year as of 30 June 1971. Commendations include letters from outside of the employee's department, awards for cost reduction, and awards for excellent performance or perfect attendance during a specified period.

19. Garnishments. The number of times an employee's wages were garnisheed per year as of 30 June 1971.

20. Courses. The number of training courses successfully completed both on and off duty and courses completed at outside institutions for which there were records in the employee's personnel folder divided by years of service to the company.

21. Sick leaves. The number of sick leaves divided by years of service to the company.

22. Days sick. The number of days sick divided by years of service to the company.

23. Injuries. The number of occupational injuries received per year.

24. Physical limitations (Phys lims). Whether or not an em-



ployee indicated he had a physical limitation when he was initially hired.

25. Layoffs. The number of times an employee was laid off per year.

26. Days laid off. The number of days laid off per year of service.

27. Permanent promotions (Perm proms). Permanent promotions received per year.

28. Merit increases. Merit increases in pay received per year. A merit increase was given to employees who performed their duties in an acceptable manner as determined by the supervisor who recommended that an increase be given or not given. The practice ceased as of 1963.

29. Temporary promotions (Tem proms). The number of temporary promotions received per year of company service. These included periods of time an employee performed jobs at a higher pay rate while the incumbent was absent from duty or the number of times an individual participated in field trips as a representative of the company.

30. Demotions. The number of downgrades received per year.

31. Promotions refused. The number of promotions refused by the employee or the number of downgrades he requested per year.

32. Change requests. The number of changes requested by the employee per year. Changes requested were routine in nature such as shift or department changes or changes affecting classification which

did not involve a pay rate change.

33. Changes directed (Changes dir). The number of changes directed by the company per year. These changes were the same as those defined above.

34. Absentee rate. The number of times an employee was absent per year excluding vacations, sick leaves, layoffs, and formal absences requested for personal or military reasons.

35. Late rate. The number of times late per year of company service. Also included are the number of times an employee arrives on time but fails to complete his shift (short times).

36. Grievance rate. The number of grievances submitted per year prior to 1 January 1960.

37. Letter of indebtedness (LOIs). Letters on file in the employee's record which solicit the aid of the company in collecting for an overdue debt divided by the years of service to the company.

38. Medical limitations (Medical lims). The number of medical notices that restrict the employee from performing some physical tasks received per year. Examples include no prolonged standing for two weeks, lifting no weight over 20 pounds for two weeks, and not using left arm for three weeks.

39. Leaves requested. The number of absences for personal reasons per year of service. Included are absences for unstated reasons, harvesting a crop, or entering active military duty for periods

of from one week to four years. Involves no loss in seniority.

40. Days absent. The number of days off per year for the personal absences described above.

## CHAPTER IV

### RESULTS

The information was punched on data cards using two significant figures for all variables except dichotomous data. For example, years of service to the company were expressed as 18, EPNs per year as .31, and changes per year as 1.2. Dichotomous data were expressed as 0 and 1 or 1 and 2. For example, marital status was indicated by using 1 for married and 0 for single; race by using 1 for nonwhite and 0 for white; and birthplace by using 1 for born in Georgia and 2 for born outside of Georgia.

A one-way multivariate analysis of variance procedure was used to determine the overall differences between groups on the 40 dependent variables. With matched groups the multivariate test of difference between groups is not exactly appropriate because the groups samples are not independent. Still it is expected that this test is conservative in testing the difference compared to a more appropriate multivariate test that takes the dependence between groups into account. A computer program to do the more appropriate multivariate test was not available. A Univac 1108 program devised by Clyde, Cramer, and Sherin (1966) was used to obtain dependent-variable means, standard devia-

tions, the overall  $\underline{F}$  ratio, and the level of significance for the  $\underline{F}$  ratio.

An overall multivariate  $\underline{F}$  ratio of 2.968 was obtained. Using Wilk's lambda criterion with 40 and 459 degrees of freedom, the two groups were significantly different with  $\underline{p}$  less than .001.

Table 1 lists the means and standard deviations for all 40 variables for the two samples respectively. Since the subjects were matched on sex, seniority, and job classification,  $\underline{t}$  tests were computed for each variable using the procedure described by Roscoe (1969) for comparing two related samples. The results of these tests are shown in Table 2, which gives the mean difference between samples, estimated standard error of the difference, and the corresponding  $\underline{t}$  value for each variable respectively. Using a level of significance of .02 and a two-tailed test, the critical values of  $\underline{t}$  for 249 degrees of freedom were approximately -2.34 and +2.34 respectively. The reason .02 was selected as a significance level was that variables meeting this criterion for significance would have a greater likelihood of standing up under cross-validation than if a less stringent criterion were selected. It should be pointed out, however, that the sequence of  $\underline{t}$  tests performed on the 40 variables does not represent a sequence of independent tests because the variables are moderately intercorrelated. Nevertheless, the use of such a series of tests was justified on a heuristic basis in an exploratory study such as this one. Out of the 40  $\underline{t}$  tests, 14 yielded values of  $\underline{t}$  exceeding the critical values. These sig-

Table 1. Means and Standard Deviations of 40 Dependent Variables  
for Grievant and Nongrievant Samples

	Means		Standard Deviations	
	Griev- ants	Non- grievants	Griev- ants	Non- grievants
1. Wage Increases	.189	.163	.109	.075
2. Marital Status	.760	.792	.428	.407
3. Exemptions	2.688	2.932	1.676	1.717
4. Owns Home	.288	.368	.454	.483
5. H to W Ratio	.442	.437	.062	.062
6. Birthplace	1.216	1.208	.431	.407
7. Birth Year	25.348	22.064	9.449	9.032
8. Hire Age	28.692	31.384	7.973	7.268
9. Veteran	.604	.544	.490	.499
10. Military Status	.252	.204	.435	.404
11. Education	10.584	9.876	4.020	2.284
12. Jobs Held	3.224	3.380	1.774	1.741
13. Residences	2.172	1.964	1.320	1.217
14. Police Record	.108	.072	.311	.259
15. Race	.044	.072	.006	.259
16. Derog Info	.112	.044	.316	.206
17. EPNs	.055	.044	.104	.084
18. Commendations	.144	.141	.153	.140
19. Garnishments	.027	.019	.095	.066
20. Courses	.165	.133	.205	.191
21. Sick Leaves	.059	.084	.092	.128
22. Days Sick	3.300	3.872	6.351	8.688
23. Injuries	.005	.011	.018	.056
24. Phys Lims	.108	.016	.311	.126
25. Layoffs	.050	.040	.090	.075
26. Days Laid Off	8.832	5.200	17.702	11.609
27. Perm Proms	.291	.249	.184	.188
28. Merit Increases	.222	.233	.184	.168
29. Tem Proms	.182	.138	.216	.204
30. Demotions	.187	.152	.171	.143
31. Promotions Refused	.044	.054	.096	.105
32. Change Requests	.036	.030	.084	.085
33. Changes Dir	.989	.960	.673	1.152
34. Absentee Rate	6.560	5.492	7.225	4.672
35. Late Rate	2.816	2.080	5.485	3.008
36. Grievance Rate	.172	.108	.227	.160
37. LOIs	.018	.011	.068	.043
38. Medical Lims	.290	.321	.424	.522
39. Leaves Requested	.012	.004	.038	.021
40. Days Absent	3.348	1.012	12.006	7.007

Table 2. Related Samples t Tests

Variable	Difference Between Means	Standard Error	<u>t</u>
1. Wages	.03	.01	3.945*
2. Marital Status	-.03	.04	-.894
3. Exemptions	-.24	.14	-1.768
4. Owns Home	-.08	.04	-1.883
5. H to W Ratio	.00	.01	.925
6. Birthplace	.01	.04	.218
7. Birth Year	3.28	.68	4.829*
8. Hire Age	-2.69	.62	-4.359*
9. Veteran	.06	.04	1.453
10. Military Status	.05	.04	1.296
11. Education	.71	.27	2.577*
12. Jobs Held	-.16	.16	-1.001
13. Residences	.21	.11	1.901
14. Police Record	.04	.02	1.483
15. Race	-.03	.02	-1.532
16. Derog Info	.07	.02	3.007*
17. EPNs	.01	.01	1.434
18. Commendations	.00	.01	.217
19. Garnishments	.01	.01	1.097
20. Courses	.03	.02	2.081
21. Sick Leaves	-.02	.01	-2.628*
22. Days Sick	-.57	.67	-.857
23. Injuries	-.01	.00	-1.653
24. Phys Lims	.09	.02	4.271*
25. Layoffs	.01	.01	1.650
26. Days Laid Off	3.63	1.08	3.350*
27. Perm Proms	.04	.01	3.085*
28. Merit Increases	-.01	.01	-.798
29. Tem Proms	.04	.02	2.433*
30. Demotions	.04	.01	2.841*
31. Promotions Refused	-.01	.01	-1.156
32. Change Requests	.01	.01	.798
33. Changes Dir	.03	.08	.353
34. Absentee Rate	1.07	.52	2.039
35. Late Rate	.74	.40	1.841
36. Grievance Rate	.06	.02	4.010*
37. LOIs	.01	.01	1.455
38. Medical Lims	-.03	.04	-.775
39. Leaves Requested	.01	.00	3.193*
40. Days Absent	2.34	.89	2.633*

\*P less than .02.

nificant t's are indicated in Table 2 by an asterisk.

The first variable associated with a significant value of t was wage increase rate. The grievant wage increase rate is significantly higher than the nongrievant wage increase rate. The year-of-birth variable was also associated with a significant difference. The average year of birth for grievants was 1925, which is significantly later than 1922, the average year for nongrievants. Furthermore, on the average, grievants started to work for the company at a younger age than the nongrievants and completed more years of formal schooling.

The letters of recommendation solicited by the company from acquaintances and work history from former employers contained more derogatory information on the average for grievants than they did for nongrievants. The grievants had a greater average number of sick leaves than nongrievants and were hired initially with some sort of physical limitation more often than were nongrievants.

Grievants averaged longer layoff periods than nongrievants. Grievants received more permanent and temporary promotions than nongrievants but were demoted more often also. The grievants also submitted a larger average number of grievances prior to 1960 than did the nongrievants. Finally, the grievant subjects on the average took more personal and military absences for longer periods than did the nongrievant subjects.



Pooled-Within-Sample  
Intercorrelations Among Variables

A useful by-product of the multivariate analysis of variance was the pooled-within-sample intercorrelation matrix for the 40 variables. This matrix is shown in Appendix B. In computing these correlations, those portions of the scores contributing to differences between groups are eliminated. Obtaining correlations in this way is desirable because it eliminates possible artificial sources of covariance due to differences between samples when, as is the case in this study, the samples are not both representative samples of some exhaustive sub-populations from some larger populations. The intercorrelations are useful both for suggesting potential relationships among the variables and making one aware of the dependencies among the variables that may have some bearing on the interpretation of the series of t tests described previously.

On heuristic grounds a correlation coefficient with absolute magnitude greater than .110 was regarded as significant at the .01 level (cf. Hays 1963, page 529). It should be noted that this level of significance is for a single bivariate correlation coefficient. Testing each individual correlation coefficient for significance does not involve a sequence of independent statistical tests, and so the true probability of making a Type I error in the case of any correlation coefficient in the sequence of tests is unknown.

## CHAPTER V

### DISCUSSION

The results of the present study appear to be most in agreement with the findings reported by Ash (1970). Both studies found that grievants were about three years younger than nongrievants and that this difference was significant. Race and veteran status, Ash's other two differentiating variables, were not discriminating in the present study although the difference patterns are the same. Both studies indicated that grievants tended to be Caucasian and veterans more often than nongrievants.

The present findings also support in part the results of DeWire (1972). The pattern of differences between the means of comparable variables in the two studies are the same except for the wage increase rate variable. DeWire found no difference between multiple grievants and nonmultiple grievants on this variable, and the present study showed that grievants received significantly higher wage increases than did nongrievants. Even though difference patterns were similar, only one variable, promotions, was different at a level of significance less than .02 in both studies. The reasons the two studies do not reflect exactly the same results may be that DeWire used nonmultiple grievants rather

than nongrievants to make up his comparison group. The number of subjects in DeWire's study was 97 in each group compared to 250 in each group in the present study. The greater number of subjects results in increased sensitivity to small differences. Finally, the operational definitions of variables may not have been exactly the same in both studies.

Eckerman's (1948) findings two decades earlier conflict with the results of the present study in terms of wage increases, educational level, age of grievants, marital status, number of exemptions, and number of jobs held prior to hire. Two of these, wage and age of grievants, were significantly different in opposite directions in both studies. The other differences were insignificant in at least one of the studies. Variables in which both studies are in agreement include veteran status, race, letters of indebtedness, and routine personnel changes. None of the foregoing were significantly different in both studies. It is important to note that the Eckerman study did not compare matched samples of grievants and nongrievants. One of the significant findings in that study was that grievants had more net service to the company than did nongrievants.

The Sulkin and Pranis (1967) findings conflict with the results of this study in terms of days on sick leave and wage increases. Points of agreement include age, late and absentee rates, educational level, and race. The only variables significantly different in both studies

were wages and educational level.

Several factors may account for differences between the results of the present study and those reported by Eckerman and Sulkin and Pranis. In the present study the nongrievant sample was matched to the grievant sample on the basis of sex, seniority, and job classification. In the other studies the nongrievant sample was comprised of individuals selected at random. Another factor which may account for the differences is that operational definitions of variables were not the same. In the Sulkin and Pranis study, for example, net totals were used for work-record data whereas in the present study these data were expressed in terms of rates. Additionally, the Sulkin and Pranis study had only 58 subjects in their grievant group and 53 subjects in their nongrievant group. Other local conditions such as plant location, type and size of plant (Ronan, 1963), work situation, and union may have had a significant influence on grievance activity, and these conditions may account for the differences.

## CHAPTER VI

### LIMITATIONS, RECOMMENDATIONS, AND CONCLUSIONS

#### Limitations

The results of this study should be interpreted with caution. For example, the study was conducted at one plant. Generalizations cannot be made without replication, especially in view of Ronan's (1963) findings that the type of plant does indeed influence grievance activity. Second, the 40 variables on which the grievant and nongrievant groups were compared were not independent measures. Hence, the series of  $t$  tests in which the two groups were compared on each of the variables was not a series of independent tests. Consequently, one must remain aware of the possibility that more significant  $t$ 's resulted by chance among this series of  $t$  tests than one would expect from multiplying the probability of making the Type I error times the number of  $t$  tests performed. To some extent it is hoped that by picking a conservative level of significance ( $\alpha = .02$ ), this bias was minimized. Finally, the paucity of studies available in the literature demands replication to support both the conclusions reached as a result of this research and the results of the other studies that appear to arrive at similar conclusions.

### Recommendations

A replication of this study should be conducted using large samples that are representative of various industries. Cross-validation should then be conducted to determine whether grievants can be distinguished from nongrievants using the significantly different variables identified in the studies. Random samples of employees should be selected and their personnel records examined. Those individuals who score high or low on the variables in relation to the others within the sample should be labeled either grievants or nongrievants as appropriate. Next, the grievance files should be examined to determine who within the samples have actually submitted grievances in the past and how often. The groups identified as grievants or nongrievants in terms of the predictor variables should be compared statistically with those identified as grievants or nongrievants as a result of the grievance file search. If the groups are the same, generalizations could then be made with a greater degree of confidence.

### Summary and Conclusions

The present research findings suggest that significant differences do exist between employees who submit grievances and those who do not. Grievants are younger, hired at an earlier age, more educated, more likely to have derogatory information in letters of recommendation, and hired with some sort of physical limitations more often than

the nongrievant. Additionally, their pay advances can be expected to be greater overall; they take more sick leaves; they are laid off for longer periods; they are promoted and demoted more frequently; and they take more personal and military absences for longer periods of time than nongrievants. Finally, if one considers a finite period of time in studying grievance activity, he can expect to find that grievants submit more grievances prior to the period under investigation than do nongrievants.

APPENDIX A

GRIEVANCE PROCEDURE



## APPENDIX A

### GRIEVANCE PROCEDURE

The formal grievance procedure at the plant where this study was conducted consists of three steps plus a final arbitration step. An employee who feels that the company failed to live up to some aspect of the union-management agreement in such a manner as to adversely affect him in some way is entitled to submit a grievance without jeopardizing his position with the firm. Grievances normally concern problems associated with pay, wages, hours of employment, or other conditions of employment. An employee with one of these problems is encouraged to talk it over with his immediate supervisor. However, if he so desires, he may deliver a written grievance on a special grievance form to his shop steward in an attempt to gain a settlement at Step 1 of the grievance procedure. A shop steward is an employee elected by the union members to handle grievances and complaints within a particular department of the plant. The grievance must be presented to the department head by the steward within 30 days of the alleged occurrence, and the department head must provide a written reply on the grievance form within seven working days after he receives the grievance. If a settlement is not reached, the steward and depart-

ment head must prepare a statement specifying the points upon which the company and union are in agreement and the points upon which they are in disagreement. If the union decides to pursue portions of the grievance not settled at Step 1, it has five working days to deliver a written copy of the grievance to the labor relations office for consideration under Step 2 of the grievance procedure. At this step a representative of the union and a representative of the labor relations office meet within four working days of receipt of the grievance and attempt to reach a settlement. The labor relations office is responsible for delivering a written reply concerning the grievance to the union within ten working days of the receipt of the grievance at Step 2. If a settlement is not reached, the union and labor relations representatives prepare a statement outlining points upon which agreement was reached and the points upon which no agreement was reached. If the union decides to pursue unsettled portions of the grievance to Step 3, it must serve written notice of certification of that fact to the labor relations office within five working days after receipt of the reply indicating a failure to settle at Step 2. At Step 3 the grievance is presented for review by the classification grievance committee or the labor relations committee, whichever is appropriate, within 30 days after receipt of the written notice of certification. The classification grievance committee, which consists of two company and two union representatives, reviews all grievances in which the employee alleges that, by reason

of the performance of certain duties, he is entitled to a job classification different from the one he holds. The labor relations committee, which consists of five union and five company representatives, reviews and attempts to settle all grievances submitted by employees which remain unsettled after Step 2 procedures have been followed and the subject of the grievance does not involve work classification. If still unsettled, the grievance may then be referred to arbitration for final disposition. The arbitrator is determined by mutual union-management agreement or selected from a list of five names submitted by the Federal Mediation and Conciliation Service. In the latter case, selection is made by the company and union alternately striking one name from the list until only one name remains. The one remaining individual is designated as the arbitrator. When this procedure of selecting the arbitrator is being used, the right to strike the first name is determined by lot. The decision of the arbitrator concerning the grievance is binding on both union and management.

## APPENDIX B

### POOLED-WITHIN-SAMPLE

### INTERCORRELATIONS AMONG VARIABLES

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. Wage Increases																					
2. Marital Status	-224																				
3. Exemptions	-215	431																			
4. Owns Home	-120	312	249																		
5. H to W Ratio	036	-085	-113	-144																	
6. Birthplace	044	-037	-050	-109	024																
7. Birth Year	437	-430	-445	-314	148	-005															
8. Hire Age	-271	439	416	353	-192	039	-894														
9. Veteran	009	000	005	-048	-146	038	140	-134													
10. Military Status	203	-116	-059	-101	-017	077	311	-263	370												
11. Education	151	-270	-268	-074	050	051	311	-261	-013	094											
12. Jobs Held	-146	318	312	185	-085	017	-318	323	-029	-129	-166										
13. Residences	018	203	088	-118	055	104	015	055	048	015	-019	319									
14. Police Record	117	-030	-088	-051	002	041	125	-073	034	092	110	-004	082								
15. Race	-087	-054	034	-051	-087	-084	009	-001	027	052	002	-109	-069	015							
16. Derog Info	102	-036	-007	-034	-058	012	013	034	-029	-023	127	071	051	110	-033						
17. EPAs	052	-151	-059	-103	-037	-015	141	-095	-111	043	188	026	-014	163	039	240					
18. Commendations	032	005	030	068	042	011	-007	090	-009	050	-046	021	-082	-062	-053	-012	-111				
19. Garnishments	-024	031	059	014	-064	-006	-007	052	-099	-008	008	034	030	067	115	125	441	-105			
20. Courses	146	004	-057	-042	-009	121	122	-129	150	166	070	020	146	037	-092	-074	-021	056	-006		
21. Sick Leaves	-141	097	-011	074	-032	-034	-173	136	-165	-093	-075	087	-017	-069	-036	013	174	-023	167	-086	
22. Days Sick	-139	087	-020	003	-030	-038	-131	120	-144	-183	-052	069	-004	-024	-042	001	222	-117	267	-060	510
23. Injuries	-067	023	-002	-032	011	047	-101	-077	-033	-031	-083	055	069	-011	-043	-002	106	-091	128	-059	371
24. Phys Ills	-003	108	073	040	-037	-054	-135	124	-004	-082	-063	098	010	053	019	025	055	-110	032	-058	144
25. Layoffs	158	-024	-067	-076	031	074	112	-082	093	045	028	-125	028	147	020	019	-010	-052	008	034	-109
26. Days Laid Off	131	-084	-040	-061	053	034	101	-093	060	026	038	-137	-006	221	032	041	-026	-051	-024	-006	-072
27. Perm Proms	384	-226	-139	-074	023	008	315	-258	027	103	169	006	056	097	-030	051	132	-024	037	168	-075
28. Merit Increases	-172	-067	034	-059	075	006	-052	-083	041	-019	027	-002	013	-027	-011	-025	017	014	033	140	045
29. Ten Proms	074	-082	-043	-082	063	052	-131	141	066	037	040	-006	013	-037	-054	-005	-056	062	049	122	-065
30. Demotions	106	-121	-015	-017	-030	035	-139	106	056	041	140	018	055	021	-042	012	025	-013	081	132	-016
31. Promotions Refused	006	-112	-123	-056	-012	-008	115	-064	021	126	027	026	008	030	109	028	090	-055	039	000	-016
32. Change Requests	092	-044	-005	009	-036	-033	091	-103	054	023	050	-042	020	-040	-030	-014	-011	-070	012	-005	-006
33. Changes Dir	256	-043	-024	-042	064	013	131	-133	156	123	078	-053	065	034	-008	051	041	032	039	197	-082
34. Absentee Rate	075	003	-071	-004	-026	006	125	-081	-055	095	029	088	008	040	-017	043	253	-079	100	-029	222
35. Late Rate	066	-040	-074	-045	-006	067	148	-133	000	138	048	-006	-031	-007	156	-027	157	-047	107	018	058
36. Grievance Rate	-102	004	146	-037	015	116	-157	026	-058	-121	-025	-015	043	-022	-100	-076	031	-057	000	013	086
37. LCIs	-084	014	124	-054	026	-040	-023	006	004	025	-065	023	-066	-030	161	077	124	-050	365	-101	128
38. Medical Lns	-090	001	054	051	-074	010	-147	143	-082	010	-044	097	-027	042	-046	044	183	-021	173	-006	583
39. Leaves Requested	172	-242	-201	-030	040	053	267	-243	-147	051	163	-065	-070	040	061	063	-010	-049	-045	-049	-017
40. Days Absent	183	-202	-190	-125	064	-031	247	-256	-172	015	222	-006	-095	100	092	120	035	-040	-016	-065	-052

Variable	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
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23. Injuries	105																		
24. Phys Lim	135	050																	
25. Layoffs	-001	022	035																
26. Days Paid Off	-042	007	-012	713															
27. Perm Proms	-010	-012	-037	154	127														
28. Merit Increases	-040	011	054	-002	033	086													
29. Per Proms	-075	-020	-037	032	043	125	130												
30. Demotions	-04	-025	-029	227	107	134	100	142											
31. Promotions Refused	-005	004	022	001	050	223	037	007	174										
32. Change Requests	-021	004	-055	-030	-015	051	051	004	002	-003									
33. Change Dir	-067	023	003	125	169	134	-025	010	124	080	111								
34. Absentee Rate	20	002	143	-022	002	-024	067	025	-039	239	136	209							
35. Late Rate	-037	-034	100	-027	051	-004	005	070	011	354	112	222	631						
36. Grievance Rate	12	049	010	040	042	-002	227	-008	044	-071	055	020	045	040					
37. LCIs	000	137	103	013	055	-054	025	-028	-043	001	-027	016	046	034	008				
38. Medical Lim	463	214	117	016	049	-046	010	127	-166	-035	-342	-010	199	061	051	066			
39. Leaves Requested	-033	-003	-006	-012	025	200	005	011	054	000	-017	017	034	074	-065	-038	050		
40. Days Absent	-050	-017	-001	-007	116	220	071	023	101	056	-040	032	-013	016	-043	-015	042	752	

Appendix B: Pooled-Within-Sample Intercorrelations Among Variables (page 2 of 2)

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